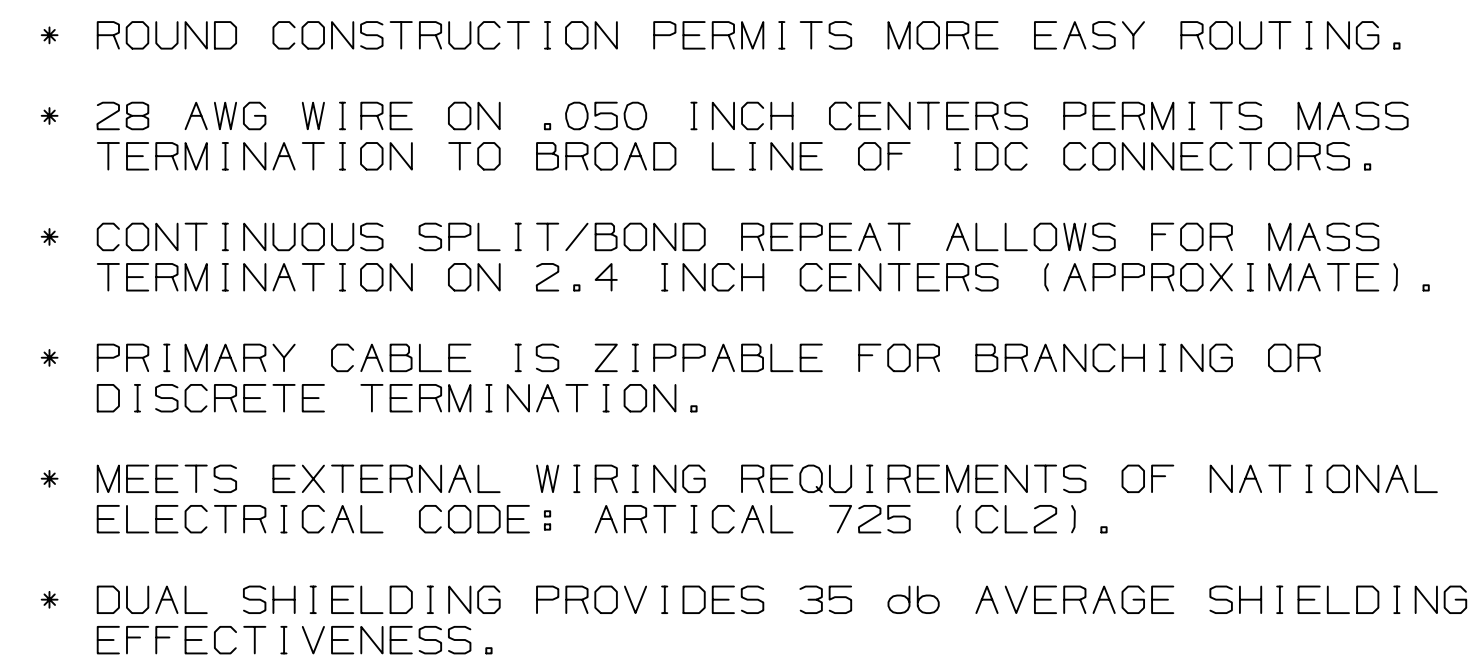


.050" 28 AWG STRANDED, MASS TERMINATABLE, PVC/PVC



1. REGULATORY INFORMATION:
VISIT 3M.com/regs
2. IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND THAT
CONTAINED IN THE PRODUCT
SPECIFICATION, THE PRODUCT
SPECIFICATION TAKES PRECEDENT.
3. RED MARKING ON ONE EDGE OF
PRIMARY CABLE DESIGNATES
WIRE #1.
4. DIMENSION "B" PERTAINS TO
BONDED AREA ONLY.

3659 / XX XX XX

- BLANK = STANDARD
SF = SPLICE FREE

NOTE:
AVAILABLE IN STANDARD LENGTHS OF 100 FT OR 300 FT ROLLS,
PLEASE SPECIFY WHEN ORDERING.
CONTACT 3M FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS
AND/OR CUSTOM ROLL LENGTHS.

2 PHYSICAL :

MARKING: SEE "PRINTING ILLUSTRATION" BELOW
STANDARD: 28 AWG, 7 X 36 AWG [7 X Ø .127] TINNED STRANDED COPPER
CONDUCTORS: .001 [.03] THICK ALUMINUM/POLYESTER FILM FOIL AND 90%
SHIELDING: COVERAGE TINNED COPPER BRAID.

2 ELECTRICAL :

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	62Ω	106Ω
CAPACITANCE:	27.7 pF/ft [90.88 pF/m]	15.2 pF/ft [49.9 pF/m]
INDUCTANCE:	0.11 μH/ft [0.35 μH/m]	0.17 μH/ft [0.57 μH/m]
PROPAGATION DELAY:	1.72 ns/ft [5.64 ns/m]	1.62 ns/ft [5.31 ns/m]
VELOCITY OF PROPAGATION:	59%	62%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS
WITH SHIELD GROUNDED.
BALANCED IS MEASURED BETWEEN SIGNAL CONDUCTORS WITHIN A PAIR.
WITH THE SHIELD FLOATING.

2 ENVIRONMENTAL :

FLAMMABILITY RATING: USA; N.E.C. 725, CL2
CANADA; FT1

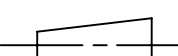
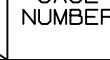
CONTACT 3M FOR AVAILABLE OF ADDITIONAL
CONDUCTOR COUNTS.

"PRINTING ILLUSTRATION"

UL® CL2 75°C 28 AWG OR AWM 20267 3M NU **UL® AWM II A/B 80°C 300V FT1 EU <50V**



DIMENSIONS: INCHES [MM]
[MM] IS FOR REF. ONLY

DESIGN REFERENCE				NEXT ASSEMBLY				REV		ECO		ISSUE DATE AND DESCRIPTION				DRFT		CHKD			
ACROSS CODES								DRFT		CASTIGLIONE		DATE		JUN 28, 2023		MFG		DATE			
								CHKD				DATE				APPRV.		F. RODRIGUEZ			
																		JUN 28, 2023			
DIVISION				DIVISION CODE				DEPP													
DO NOT SCALE DRAWING				SCALE				TOLERANCES EXCEPT AS NOTED				3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2025 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.							
								INCHES .00 ±.1 .00 ±.05 .000 ±.010 .0000 ±.0005		TITLE		RD SHIELDED/JACKETED, FLAT CABLE, 3659 SERIES									
THIRD ANGLE PROJECTION								MILLIMETERS 0 ± .0 .000 ± .000 ±		CAGE NUMBER		SIZE		DRAWING NO.				REV.			
INTERPRET PER ASME Y14.5 - 2018												D		78-5100-0083-5				D			
MAX SURFACE ROUGHNESS ☒ ALL SURFACES ☐ MARKED ONLY				MAX SURFACE ROUGHNESS ☒ ALL SURFACES ☐ MARKED ONLY				ANGLES ±		MODEL		3659		DET.		ESTS		☒ YES ☐ NO			
																		SHT 1 OF 2			

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INFORMATION CALL 800-225-5373

3M™ ROUND SHIELDED/JACKETED, FLAT CABLE, 3659 SERIES
.050" 28 AWG STRANDED, MASS TERMINATABLE, PVC/PVC

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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Austin, TX 78753-5380
1-800-225-5373
www.3M.com/interconnect

D	122370	APR 16, 2025 REVISE DIM A	JNC	FJR
C	64249	JUN 28, 2023 REVISE NOTES AND REDRAW	JNC	FJR
B	23307	APR 24, 2009 REVISE NOTES	RED	ARM
A	23052	APR 07, 2009 REVISE ORDERING INFO	RED	ARM

DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION				DRFT		CHKD	
ACCESS CODES				DRFT CASTIGLIONE		DATE JUN 28, 2023		INFO				DATE			
				CHKD		DATE		APPROV. RODRIGUEZ				DATE JUN 28, 2023			
DIVISION				DIVISION CODE DEPP				 3M Center St. Paul, MN 55144 © 3M COPYRIGHT 2025 This document and the information it contains are 3M property and may not be reproduced or further distributed without the prior permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.							
DO NOT SCALE DRAWING		SCALE		TOLERANCES EXCEPT AS NOTED											
				INCHES .0 ± .01 .00 ± .005 .0000 ± .0005				TITLE RD SHIELDED/JACKETED, FLAT CABLE, 3659 SERIES							
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INTERPRET PER ASME Y14.5 - 2018				MAX SURFACE ROUGHNESS ALL SURFACES MARKED ONLY				MODEL 3659 DET. LISTS ☒ YES ☐ NO SHT 2 OF 2							

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